PC21 Draft Determination

NI Water Response

Annex 5.23 A Guide to Integrated Investment Appraisals – Development Objective

Version 2.1

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Contents

1. Introduction

This document asks that the UR create a new development output as follows:

A guide to Integrated Investment Appraisals: NI Water to work with DfI and the UR to develop and agree a new approach to investment appraisal to provide wider outcomes and how this will be implemented in relation to the allocation of funding, governance, reporting and monitoring.

Ideally this, including an implementation plan, are to be agreed by 1 April 2023.

2. Background

NI Water is required to safely and efficiently provide water and wastewater services. This is capital intensive and has resulted in an asset base with a value in excess of £6bn and a large annual capital investment programme. As the second largest land owner in Northern Ireland and the single largest consumer of electricity NI Water has become a custodian of the environment.

These factors provide many opportunities for NI Water to work in partnership with other companies and parts of government to provide more holistic integrated shared solutions that will provide wider outcomes for the good of society. These wider challenges faced by society are many and include:

- How to adapt to climate change, in particular to changes to raw water quality and quantity and the increased risk of a range of types of flooding due to more extreme weather events;
- How to mitigate against climate change and help achieve net zero carbon by 2050;
- How to protect and enhance natural habitats and the eco-system services they provide; and
- How to provide wider recreational and access benefits for the good of people's wellbeing.

This is an approach that is being pioneered in Northern Ireland by the Living With Water Programme, under which a number of Partners are working together to develop and deliver integrated solutions related to drainage and wastewater for Greater Belfast in a way that will provide wider outcomes, at the same time as capital efficiencies and reduced disruption. Under the LWWP Partners have recently commenced work on a new investment appraisal template and guidance that will take into consideration the 6 capitals.

To allow NI Water to adopt a similar approach across Northern Ireland will require:

- a change in the way in which potential capital investment projects are appraised and the recommendations set out in business cases; and
- changes in how capital investment is allocated, funded and monitored

This is an approach that Scottish Government, WICS and Scottish Water have worked to develop and will start to implement from 2021, as set out in Annex A.

3. Business Case Evolution

Business case cost benefit analysis is one of the essential functions of nearly every organisation, allowing them to ensure that they have the necessary financial resources to continue operating.

However, financial resources are not the only thing upon which an organisation depends. Physical resources, such as clean water, raw materials, energy and a skilled workforce; and non-physical resources such as reputation and knowledge, are equally vital to the continued existence of any organisation. These non-financial resources (both physical and non-physical) are rarely included in corporate reporting. An organisation's impacts, positive and negative, on these resources are rarely captured by conventional accounting and reporting processes. This can lead to sub-optimal decisions which are contributing to local and global sustainability challenges.

Considering value beyond the traditional financial perspective can help business focus on what really matters. By looking at a broad range of economic, environmental and social priorities, we can consider our impacts and associated economic value like never before. This new approach can provide fresh insight to help us shape our strategy to ensure the resilience of our services, enhance our positive impact on the economy and the environment, and maximise the value we create for society.

Our Strategy (2021-46) commits us to deliver what matters by creating and sustaining value over the short, medium and long term. This value extends across all six capitals or pools of resources – financial (financial efficiency and resilience), natural (plants, animals, water, soils and the eco-system services they provide), social (stakeholder relationships), human (talent, health and wellbeing), manufactured (pipes, treatment works, plant and equipment, IT and offices) and intellectual capital (knowledge and processes) to ensure that we are profiting from creating sustainable solutions for people and the planet.

A key feature of the capitals approach is that non-financial impacts and dependencies can often be expressed in monetary terms, allowing different impact categories to be directly compared, providing greater insight into their magnitude and importance, and helping to identify opportunities to provide greater value for money for our customers and the communities we serve.

Using the six capitals approach is helping us change for the better by improving our understanding of the risks and dependencies we are managing, and the impacts we have, both positive and negative. By thinking of 'value' in the broadest terms, we are moving beyond traditional economic business case decision making. We are committed to developing and embedding the approach into our standard business processes.

A first step in this process is developing a new business case appraisal template in conjunction with our key stakeholders and piloting it on the Living With Water Programme. The intention is to roll out the new business case template so that it can be used to inform the investment decisions for the PC27 Business Plan (2027-33), which NI Water will be required to submit in January 2026. Accordingly it will need to have been trialled on pilot projects, revised and agreed and then made available for wider use after a training programme for NI Water staff and supply chain partners from the end of 2023.

4. Development Approach

At this stage whilst a 'sense of urgency' appears to be clear and shared by a number of stakeholders, there are some development challenge areas that need to be examined:

Multi Agency Agreement – The scope of challenge and benefits in addressing the holistic needs and commitments of Northern Ireland such as the environment, climate change and carbon neutrality is bigger than any one government agency or private organisation. Only by working together can we start to address the change that is required. This process should help NI Water form a template guide for the integration of all its infrastructure appraisals, strategies and projects where a multi-agency approach is beneficial. The process should also define flexible methods for multi-agency funding changes.

Regulatory challenge – NI Water has economic and environmental regulatory commitments. The integrated appraisals should enable NI Water to outperform its regulatory commitments. Therefore each appraisal should not increase the following 4 parameters unless compensated or adjusted by a new regulatory commitment and/or funding.

- Regulated CAPEX or OPEX (Capital Del, Resource Del);
- Risk (Scope Risk or Tender to Outturn Risk);
- Resources to deliver projects; and
- Timeline of planned projects and its regulator output dates.

Additionally we will need to discuss with the UR how development and implementation will be governed and monitored. Plus how this will impact efficiency challenges and wider PC21/27 Business Plan Targets.

Types of Appraisal Cost – NI Water's tariff model and funding is defined through Capital Del and Resource Del allocations. The integrated appraisal process is likely to define best value through a variant of whole life cost, TOTEX, whole life carbon (natural capital). Six Capital analysis may go even further. This guide will help to enable flexibility in decision making between Capital Del and Resources Del investment.

Maturity of Analysis – Natural Capital, 6Cs, Carbon Neutrality, climate change commitments are all areas that are radically evolving. It is really important that each factor is challenged to establish a baseline analysis method and incrementally tested to a point where a new regulatory position can be established. It is likely that pilot projects will be formed and discussed to test new integrated appraisal requirements prior to the introduction of new commitments in PC27.

Unit Costing – Standardised unit costing is vitally important in order to ensure the supply chain and multi-agencies are evaluating in a consistent, evidence based way. It is likely that our iPAC costing system will have to be significantly upgraded to incorporate Carbon, Natural Capital and 6Cs analysis. This development objective will define the effort required to transform our costing systems and estimate any additional effort required for each project or appraisal to undertake this additional analysis.

Resources – It is currently difficult to estimate the volume and type of resources that will be required to undertake this change. This development objective will establish the resource and business change that is required to move to integrated appraisal analysis as Business as Usual (BAU).

We recommend that, like the approach being taken to develop the LWWP investment appraisal template and guidance, a ‘guiding coalition’ (Project Steering Group) be established which will include representatives from DfI, UR, DAERA, DoF, NIEA and multi-directorates from NI Water.

Annex A - Draft Inputs

The documents below are some of the legislative literature that need to be discussed and considered in this process:

Ref	Document	Why Important
1	Northern Ireland Guide to Expenditure Appraisal and Evaluation (NIGEAE)	The Northern Ireland Guide to Expenditure Appraisal and Evaluation is the primary guide for NI Departments on the appraisal, evaluation, approval and management of policies, programmes and projects.
2	HMT The Green Book (March 2018)	Between 2016-18 the Natural Capital Committee (NCC) worked with H.M. Treasury to advise and co-author the Green Book guidance regarding the incorporation of natural capital, ecosystem services and the value of associated goods and services into government appraisals. The guidance was incorporated into the revised Green Book published in March 2018.
3	CIRIA Project W047b B£ST Guidance (2019)	This provides guidance to assess the benefits of blue and green infrastructure. B£ST is used to assess and monetise many of the financial, social and environmental benefits of blue-green infrastructure. The results enable users to understand and quantify the wider value of drainage and natural flood management measures. This can support investment decisions. Benefits can be used to identify stakeholders and potential funding routes.
4	UKWIR Reports	UKWIR Report CL/04/14: 'Benefits and Limitations of Integrating Natural Capital Accounting (NCA) and Ecosystems Services Assessment (ESA) into Water Company Activities' (2016) UKWIR Project CL1157: 'Implementing Ecosystem Services and Natural Social Capital Accounting Approaches'
5	Outputs of the Water Industry Forum Workshop 'Developing a common set of NCA principles' (12 Oct 2020)	This workshop was used to develop a set of good practice principles for Water UK, and the industry's respective regulators to approve and support for use in the drainage and wastewater sector. It was attended by over 30 staff from regulators, government and water companies from across the UK. These principles should inform the NI investment appraisal template
6	LWWP Templates	Scoping work on these commenced in Feb 2020, with Project Steering Group having first met in Nov 2020. This includes representatives from DfI, DAERA, DoF, UR and NI Water
7	Scottish Government, WICS and Scottish Water guidance and templates	These have been developed and are to be implemented from April 2021 – refer to Annex A.
8	HM Treasury route map for climate related disclosures (9 November 2020)	HM Treasury announced in November 2020 the intention to make Task Force on Climate-related Financial Disclosures (TCFD) fully mandatory for large private companies, such as NI Water, by 2022 and across the economy by 2025. This marks an important step in establishing consistent global climate and sustainability reporting standards for corporate reporting. NI Water will have to set out how goals in our nature / climate change strategy will be achieved, monitored and assured in its corporate reporting. Development of six capitals decision making and reporting (including embedding carbon in business case decision making) will play an important role in reporting progress against the strategy.

Annex B - WICs and Scottish Water's New Approach to Capital Investment Appraisal

For the first time, [the draft determination] also includes a ring-fenced allowance of £133m to cover any additional costs that Scottish Water has incurred in selecting an option that has a higher net present value (NPV) after allowing for externalities such as carbon, natural and social capital than the lowest financial cost option. Scottish Water will only be able to access this ring-fenced allowance if it is clearly evidenced in an appraisal. (Pg6)

The term 'economically optimal' moves away from lowest whole life cost (pg120):

Economically Optimal	To be economically optimal all investment decisions should take account of cash costs as well as the wider costs and benefits to society and the environment. This should include the cost of carbon and the costs and benefits associated with externalities such as factors impacting on social and natural capital. The impact of an intervention from a climate perspective is an integral consideration of whether it is economically optimal.

Extract from page 23:

SCOTTISH WATER'S INVESTMENT APPRAISALS

We are clear that Scottish Water should make its investment decisions in an economically optimal way (thereby keeping bills as low as they can be for the long term). This means that the appraisal of options must take account of the costs of carbon over the life of an asset and the costs and benefits of natural and social capital and other externalities.

The move from taking investment decisions on the basis of lowest economic cost, to one in which choices are made on the basis of the most beneficial long-term outcomes including service, net zero, environment, amenity and economic terms, is a significant one for Scottish Water. It will require them to balance technical expertise with the expectations of customers, communities, regulators and other stakeholders. Scottish Water will need to assess and evaluate decisions in new ways, changing the approach of the organisation. This will take time to get right.

Putting customers at the heart of Scottish Water's investment decisions will be a particular challenge, requiring insight into the needs and aspirations of their broad customer base. Further, Scottish Water must understand the views of communities on specific projects, being clear if there are additional benefits that can be secured. For this reason, we have allowed for a ring-fenced allowance of £133m to be available to cover any additional costs that Scottish Water has incurred in selecting an option that has a higher risk-adjusted NPV after allowing for externalities such as carbon, natural and social capital than the lowest cash cost option. Scottish Water will only be able to access this allowance if it is clearly evidenced in an appraisal.

To draw down this funding for broader benefits, Scottish Water will need to demonstrate that it has understood and applied an understanding of the expectations of customers and communities, as well as those of regulators and other stakeholders, to their decisions. This will help meet its commitment to the Customer Forum that: 'every decision made by Scottish Water should be the one it would take if the customer were in the room.'

With our partners in the Investment Planning and Prioritisation Group (IPPG), we will develop a mechanism for agreeing the draw down of broader benefit funds. This could be in relation to individual projects, or as a programme of work. We will seek to ensure that this mechanism helps secure Scottish Water's move to delivering the most beneficial long-term outcomes in an efficient manner, without placing unnecessary hurdles in the investment decision-making process.

This reliance on appraisals will also require Scottish Water to improve its analytical capability and its use of asset information in making its decisions. This will be vital if Scottish Water is to be able to rise to the challenge of making all of its decisions robustly and in an appropriately customer-centric fashion.

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https://www.watercommission.co.uk/UserFiles/Documents/Strategic%20Review%20of%20Charges%202021-27%20Draft%20Determination_1.pdf